

Claims

1. Method for delivering a multimedia message to a telecommunication device configured as a multimedia message sink, in which

a) the multimedia message (MMN) is transmitted to and stored in a multimedia message service center (MMNDZ) configured as a multimedia message source for delivering the multimedia message (MMN) to the telecommunication device (ETKG),

b) the multimedia message service center (MMNDZ) directly or indirectly sends the telecommunication device (ETKG) an information message (MN) informing the telecommunication device (ETKG) about the stored multimedia message (MMN),

c) for sending the information message (MN) a traffic channel connection (NKV) to the telecommunication device (ETKG) is directly or indirectly established and used to transmit the information message (MN) in an information session (IS),

d) upon the transmission of the information message (MN) the information session (IS) is terminated,

characterized in that

e) the traffic channel connection (NKV) established to the telecommunication device (ETKG) remains established at least until the telecommunication device (ETKG) has analyzed the received information message (MN) and in the context of a fetching session (AS) has retrieved the content of the multimedia message (MMN) intended for the telecommunication device (ETKG) from the multimedia message service center (MMNDZ) via the traffic channel connection (NKV).

2. Method according to Claim 1, characterized in that the multimedia message service center (MMNDZ) indicates to the telecommunication device (ETKG) in the information session (IS) that the traffic channel connection (NKV) remains established

for a specified time which is sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS).

3. Method according to Claim 2, characterized in that the signaling with the transmission of the information message (MN) takes place with the aid of a special information element (IE) of an information element container used for the transmission of the information message or with the aid of a message (MD) which is separate from the transmission of the information message (MN).

4. Method according to Claim 1, characterized in that the telecommunication device (ETKG) indicates to the multimedia message service center (MMNDZ) in the information session (IS) that it wishes the traffic channel connection (NKV) to remain established for a specified time which is sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS).

5. Method according to Claim 4, characterized in that the signaling takes place with the aid of an exchange of messages (MA) between the telecommunication device (ETKG) and the multimedia message service center (MMNDZ) with a query message (AM) sent by the telecommunication device (ETKG) and an acknowledge message (BM) sent by the multimedia message service center (MMNDZ).

6. Method according to Claim 1, 2, or 4, characterized in that the established traffic channel connection (NKV) is cleared down if the telecommunication device (ETKG) does not intend to start a fetching session (AS) at the time when the traffic channel connection (NKV) is established.

7. Method according to Claim 1, characterized in that the information message (MN) is inserted into a short message (KN) configured as a short message service message, the short message (KN) being sent by order of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

8. Method according to Claim 1, characterized in that the information message (MN) is inserted into a wireless application protocol push message and the wireless application protocol push message is inserted into a short message (KN) configured as a short message service message, the short message (KN) being sent by order of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

9. Method according to Claim 7 or 8, characterized in that the short message service center (KNDZ) is instructed by the multimedia message service center (MMNDZ) when the information message (MN) is sent by the multimedia message service center (MMNDZ) to the short message service center (KNDZ).

10. Method according to Claim 1, characterized in that the information message (MN) is transmitted with the aid of in-band signaling.

11. Method according to Claim 10, characterized in that the in-band signaling uses FSK transmission or DTMF transmission.

12. Method according to Claim 1, characterized in that the information session (IS) is carried out according to a

modem protocol or a facsimile protocol.

13. Method according to Claim 1, characterized in that the fetching session (AS) is carried out according to a TCP/IP protocol, a WSP protocol, a modem protocol or a facsimile protocol.

14. Method according to Claim 1, characterized in that audio, video and/or text data are transmitted with the multimedia message (MMN).

15. Multimedia message service center for delivering a multimedia message to a telecommunication device configured as a multimedia message sink, which as a multimedia message source

- a) has a central control unit (ZST) which controls the operating and function sequences in the multimedia message service center (MMNDZ), and to which a storage location (HLS) for storing the multimedia messages is assigned,
- b) has a receiving device (EME), for receiving multimedia messages, which receives the multimedia message (MMN) to be delivered to the telecommunication device (ETKG), and is connected to the central control unit (ZST) for the purpose of forwarding said message to it,
- c) has registration means (RM), assigned to the central control unit (ZST), which store the multimedia message (MMN) that has arrived in the central control unit (ZST) at the storage location (HLS),
- d) has information message generation means (MNEM), assigned to the central control unit (ZST), which generate an information message (MN) concerning the multimedia message (MMN) that has arrived in the central control unit (ZST), and
- e) has a transmitting and receiving device (SEE), for transmitting and receiving messages, which is connected to the

central control unit (ZST), receives the information message (MN) from the central control unit (ZST) via this connection and sends said message directly or indirectly to the telecommunication device (ETKG) in order to inform the telecommunication device (ETKG) about the stored multimedia message (MMN), such that

e1) the transmitting and receiving device (SEE) is configured so that, for sending the information message (MN), a traffic channel connection (NKV) to the telecommunication device (ETKG) is directly or indirectly established and used to transmit the information message (MN) in an information session (IS), and
e2) upon the transmission of the information message (MN) the information session (IS) is terminated,

characterized in that

g) there is a log-in node (EWK) assigned to the central control unit (ZST) and a function unit formed from the central control unit (ZST), the log-in node (EWK) and the transmitting and receiving device (SEE) is configured so that the traffic channel connection (NKV) established to the telecommunication device (ETKG) remains established at least until the telecommunication device (ETKG) has analyzed the received information message (MN) and in the context of a fetching session (AS) has retrieved the content of the multimedia message (MMN) intended for the telecommunication device (ETKG) from the multimedia message service center (MMNDZ) via the traffic channel connection (NKV).

16. Multimedia message service center according to Claim 15, characterized in that

the transmitting and receiving device (SEE) is configured so that in the information session (IS) the telecommunication device (ETKG) is informed that the traffic channel connection (NKV) remains established for a specified time which is

sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS).

17. Multimedia message service center according to Claim 16, characterized in that the central control unit (ZST) and the transmitting and receiving device (SEE) are configured so that during signaling

a) a special information element (IE) of an information element container used for the transmission of the information message is generated and transmitted together with the information message (MN), or

b) a separate message (MD) is generated and transmitted separately from the information message (MN).

18. Multimedia message service center according to Claim 15, characterized in that the central control unit (ZST) and the transmitting and receiving device (SEE) are configured so that when the telecommunication device (ETKG) in the information session (IS) indicates to the multimedia message service center (MMNDZ) that it wishes the traffic channel connection (NKV) to remain established for a specified time which is sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS), the traffic channel connection (NKV) will not be cleared down.

19. Multimedia message service center according to Claim 18, characterized in that the transmitting and receiving device (SEE) is configured so that during signaling an exchange of messages (MA) takes place between the telecommunication device (ETKG) and the multimedia message service center (MMNDZ) with a query message (AM) being

sent by the telecommunication device (ETKG) and received by the transmitting and receiving device (SEE), and an acknowledge message (BM) being sent by the transmitting and receiving device (SEE) to the telecommunication device (ETKG).

20. Multimedia message service center according to Claim 15, characterized in that the information message (MN) is inserted into a short message (KN) configured as a short message service message, and the multimedia message service center (MMNDZ) is connected to a short message service center (KNDZ), so that the short message (KN) is sent on the instructions of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

21. Multimedia message service center according to Claim 15, characterized in that the information message (MN) is inserted in a wireless application protocol push message, the wireless application protocol push message is inserted into a short message (KN) configured as a short message service message, and the multimedia message service center (MMNDZ) is connected to a short message service center (KNDZ), so that the short message (KN) is sent on the instructions of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

22. Multimedia message service center according to Claim 20 or 21, characterized in that the transmitting and receiving device (SEE) is configured so that the short message service center (KNDZ) is instructed by the multimedia message service center (MMNDZ) when the information message (MN) is sent by the multimedia message

service center (MMNDZ) to the short message service center (KNDZ).

23. Multimedia message service center according to Claim 15, characterized in that the transmitting and receiving device (SEE) is configured so that the information message (MN) is transmitted with the aid of in-band signaling.

24. Multimedia message service center according to Claim 23, characterized in that the transmitting and receiving device (SEE) is configured so that the in-band signaling uses FSK transmission or DTMF transmission.

25. Multimedia message service center according to Claim 15, characterized in that the transmitting and receiving device (SEE) is configured so that the information session (IS) is carried out according to a modem protocol or a facsimile protocol.

26. Multimedia message service center according to Claim 15, characterized in that the log-in node (EWK) is configured so that the fetching session (AS) is carried out according to a TCP/IP protocol, a WSP protocol, a modem protocol or a facsimile protocol.

27. Multimedia message service center according to Claim 15, characterized in that the multimedia message (MMN) contains audio, video and/or text data.

28. Telecommunication device for accessing multimedia messages

stored in a storage location of a multimedia message service center, which

- a) has a central control device (ZSTE) for controlling the operating and function sequences in the telecommunication device (ETKG),
- b) has a fetching device (AHE) for retrieving messages and/or information, said device being connected to the central control device (ZSTE),
- c) has a transmitter/receiver (SEM) for transmitting and receiving messages, which receives an information message (MN) transmitted directly or indirectly by the multimedia message service center (MMNDZ) to the telecommunication device (ETKG), and which is connected to the central control device (ZSTE), and which forwards the information message (MN) to the central control device (ZSTE) in order to inform the telecommunication device (ETKG) about a multimedia message (MMN) stored in the multimedia message service center (MMNDZ) for the said telecommunication device (ETKG), such that
 - c1) the transmitter/receiver (SEM) for receiving the information message (MN) transmitted by the multimedia message service center (MMNDZ) in an information session (IS) is connected directly or indirectly to the multimedia message service center (MMNDZ) over a traffic channel connection (NKV) established by the multimedia message service center (MMNDZ), and
 - c2) upon the transmission of the information message (MN) the information session (IS) is terminated, characterized in that
- d) assigned to the central control device (ZSTE) are means of analysis (AWM) which are configured so that the information message (MN) received by the transmitter/receiver (SEM) via the traffic channel connection (NKV) and forwarded to the central control device (ZSTE) is analyzed,

e) the fetching device (AHE) and the central control device (ZSTE) together with the assigned means of analysis (AWM) form a function unit which is configured so that the traffic channel connection (NKV) established to the telecommunication device (ETKG) remains established at least until the transmitter/receiver (SEM) has analyzed the received information message (MN), and the central control device (ZSTE) has retrieved the content of the multimedia message (MMN) intended for the telecommunication device (ETKG) from the multimedia message service center (MMNDZ) via the traffic channel connection (NKV) in the context of a fetching session (AS) via the fetching device (AHE) in accordance with the analyzed information message (MN).

29. Telecommunication device according to Claim 28, characterized in that the transmitter/receiver (SEM), the fetching device (AHE) and the central control device (ZSTE) together with the assigned means of analysis (AWM) are configured so that when in the information session (IS) the telecommunication device (ETKG) is informed that the traffic channel connection (NKV) remains established for a specified time which is sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS), the fetching device (AHE) is activated immediately by the central control device (ZSTE) without establishing a separate traffic channel connection.

30. Telecommunication device according to Claim 29, characterized in that the means of analysis (AWM) assigned to the central control device (ZSTE) are configured so that during signaling a) a special information element (IE) of an information element container used for the transmission of the information message,

transmitted by the multimedia message service center (MMNDZ) together with the information message (MN), is detected and analyzed, or

b) a separate message (MD), transmitted by the multimedia message service center (MMNDZ) separately from the information message (MN), is detected and analyzed.

31. Telecommunication device according to Claim 28, characterized in that the transmitter/receiver (SEM) is configured so that in the information session (IS) multimedia message service center (MMNDZ) is informed that the traffic channel connection (NKV) is required to remain established for a specified time which is sufficient for the analysis of the information message (MN) and for the duration of the fetching session (AS).

32. Telecommunication device according to Claim 31, characterized in that the transmitter/receiver (SEM) is configured so that during signaling an exchange of messages (MA) takes place between the telecommunication device (ETKG) and the multimedia message service center (MMNDZ) with a query message (AM) being sent by the transmitter/receiver (SEM), and an acknowledge message (BM) being sent by the multimedia message service center (MMNDZ) and received by the transmitter/receiver (SEM).

33. Telecommunication device according to Claim 28, 29, or 31, characterized in that the central control device (ZSTE) is configured so that, with the aid of the transmitter/receiver (SEM), the established traffic channel connection (NKV) is cleared down if the telecommunication device (ETKG) does not intend to start a fetching session (AS) at the time when the traffic channel

connection (NKV) is established.

34. Telecommunication device according to Claim 28, characterized in that the information message (MN) is inserted into a short message (KN) configured as a short message service message, and the telecommunication device (ETKG) is connected to a short message service center (KNDZ) which, on the instructions of the multimedia message service center (MMNDZ), sends the short message (KN) to the telecommunication device (ETKG).

35. Telecommunication device according to Claim 28, characterized in that the information message (MN) is inserted in a wireless application protocol push message, the wireless application protocol push message is inserted into a short message (KN) configured as a short message service message, and the telecommunication device (ETKG) is connected to a short message service center (KNDZ) which, on the instructions of the multimedia message service center (MMNDZ), sends the short message (KN) to the telecommunication device (ETKG).

36. Telecommunication device according to Claim 28, characterized in that the transmitter/receiver (SEM) is configured so that the information message (MN) is transmitted with the aid of in-band signaling.

37. Telecommunication device according to Claim 28, characterized in that the transmitter/receiver (SEM) is configured so that the in-band signaling uses FSK transmission or DTMF transmission.

38. Telecommunication device according to Claim 28, characterized in that the transmitter/receiver (SEM) is configured so that the information session (IS) is carried out according to a modem protocol or a facsimile protocol.

39. Telecommunication device according to Claim 28, characterized in that the fetching device (AHE) is configured so that the fetching session (AS) is carried out according to a TCP/IP protocol, a WSP protocol, a modem protocol, a PPP protocol or a facsimile protocol.

40. Telecommunication device according to Claim 28, characterized in that the telecommunication device (ETKG) is a fixed-network or mobile-radio device, in particular a cordless mobile handset, a personal computer or a fax machine.

41. Telecommunication device according to Claim 26, characterized in that the multimedia message (MMN) contains audio, video and/or text data.